

What is claimed is:

1. A biocompatible composition comprising a therapeutic agent, a polymer and a buoyancy agent.
2. The composition of claim 1, wherein the polymer is biodegradable.
3. The composition of claim 1, wherein the composition is controllably buoyant within the cerebrospinal fluid.
4. The composition of claim 1, wherein said buoyancy agent has a specific gravity of between about 1.0063 to about 1.0075.
5. The composition of claim 1, wherein said buoyancy agent has a specific gravity greater than about 1.0063
6. The composition of claim 1, wherein said buoyancy agent has a specific gravity less than about 1.0063
7. The composition of claim 1, wherein said therapeutic agent is a neuroprotective agent and said composition is administered to a subject having a central nervous system disorder.
8. The composition of claim 1, wherein said buoyancy agent is a mixture of oxygen and nitrogen.
9. The composition of claim 1, wherein said buoyancy agent is a hydrofluorocarbon.
10. The composition of claim 1, wherein said buoyancy agent is a gas selected from the group consisting of nitrogen, argon, carbon dioxide, helium, and xenon.

11. The composition of claim 1, wherein said therapeutic agent is selected from the group consisting of inosine, citicholine, SOD, and dextrorphan.
12. A composition comprising a first polymeric particle comprising a first therapeutic agent and a second polymeric particle comprising a second therapeutic agent, wherein said first and said second polymeric particles comprise a buoyancy agent.
13. The composition of claim 12, wherein said ratio of said first polymeric particle and said second polymeric particle is 50:50.
14. The composition of claim 12, wherein said ratio of said first polymeric particle and said second polymeric particle is 60:40.
15. The composition of claim 12, wherein said ratio of said first polymeric particle and said second polymeric particle is 40:60.
16. The composition of claim 2, wherein said biodegradable polymer is a naturally derived polymer selected from the group consisting of albumin, alginate, cellulose derivatives, collagen, fibrin, gelatin, and polysaccharides.
17. The composition of claim 2, wherein said biodegradable polymer is a synthetic polymer selected from the group consisting of polyesters, polyethylene glycol, poloxomers, polyanhydrides, and pluronic.
18. The composition of claim 17, wherein said synthetic polymer is poly(lactide-co-glycolide).
19. The composition of claim 1, wherein said therapeutic agent is selected from the group consisting of L-dopa, dopamine, carbidopa, choline, acetylcholine, cholinergic neuronotrophic agents, gangliosides, nerve growth enhancing agents, living cells such as bone marrow cells or fetal neural tissue or stem cells, enzymes, antipsychotropic agents,

antidepressants, excitatory amino acid antagonist or agonist, antiepileptic medications enzymes and combinations thereof as well as antioxidants, nonsteroidal anti-inflammatory drugs (NSAIDS), steroidal anti-inflammatory agents, calcium channel blockers, NMDA antagonists, inosine, citicholine, SOD, dextrorphan, aspirin, and tetramethylpyrazine.

20. The composition of claim 1, wherein said therapeutic agent is a cancer agent selected from the group consisting of vinca alkaloids and other plant products, cytostatic drugs, cytotoxic drugs, hormones (estrogens and anti-estrogens), alkylating agents, immunomodulators (immunostimulators and immunosuppressives), hematological agents, non-steroidal products, radiopharmaceuticals, antibodies, antiandrogens, and epidermals.

21. The composition of claim 7, wherein said central nervous system disorder is selected from the group consisting of cancer, Parkinson's disease, Alzheimer's dementia, Huntington's disease, epilepsy, ALS, MS, antibiotic delivery, trauma, stroke, TBI, depression, spinal cord injury, pain management and other types of neurological and psychiatric illnesses.

22. A method for administering a therapeutic agent within the central nervous system of a subject, the method comprising contacting a central nervous system tissue with a biodegradable polymer composition comprising a therapeutic agent, a polymer and a buoyancy agent.

23. The method of claim 22, wherein said subject is diagnosed with a central nervous system disorder.

24. The method of claim 23, wherein said composition is in the form of a plurality of spherical particles from about 1 to about 25 μm in diameter.

25. The method of claim 23, wherein the therapeutic agent is selected from the group

consisting of L-dopa, dopamine, carbidopa, choline, acetyl choline, cholinergic neuronotropic agents, gangliosides, nerve growth enhancing agents, living cells such as bone marrow cells or fetal neural tissue or stem cells, enzymes, antipsychotropic agents, antidepressants, excitatory amino acid antagonist or agonist, antiepileptic medications enzymes and combinations thereof as well as antioxidants, nonsteroidal anti-inflammatory drugs (NSAIDS), steroidal anti-inflammatory agents, calcium channel blockers, NMDA antagonists, inosine, citicholine, SOD, dextrorphan, aspirin, and tetramethylpyrazine.

26. The method of claim 23 wherein the therapeutic agent is a cancer agent selected from the group consisting of vinca alkaloids and other plant products, cytostatic drugs, cytotoxic drugs, hormones (estrogens and anti-estrogens), alkylating agents, immunomodulators (immunostimulators and immunosuppressives), hematological agents, non-steroidal products, radiopharmaceuticals, antibodies, antiandrogens, and epidermals.

27. The method of claim 23, wherein the contacting a central nervous system tissue is by intrathecal administration directly into the cerebrospinal fluid of the subject.

28. The method of claim 23, wherein the central nervous system disorder is selected from the group consisting of cancer, Parkinson's disease, Alzheimer's dementia, Huntington's disease, epilepsy, ALS, MS, antibiotic delivery, trauma, stroke, TBI, depression, spinal cord injury, pain management and other types of neurological and psychiatric illnesses.

29. The method of claim 23, wherein said biodegradable polymer is a naturally derived polymer selected from the group consisting of albumin, alginate, cellulose derivatives, collagen, fibrin, gelatin, and polysaccharides.

30. The method of claim 23, wherein said biodegradable polymer is a synthetic polymer selected from the group consisting of polyesters, polyethylene glycol, poloxomers, polyanhydrides, and pluronic.
31. The method of claim 23, wherein said synthetic polymer is poly(lactide-co-glycolide).
32. The composition of claim 12, wherein said first therapeutic agent is inosine and said second therapeutic agent is citicholine.
33. The composition of claim 1, wherein said buoyancy agent is selected from the group consisting of fish oil, vegetable oil, vitamin E oil, and PEG.